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10/571,464	03/13/2006	Udo Steffl	32128227599	6494
26694 VENABLE LLI	7590 12/24/200 <b>P</b>	EXAMINER		
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			1796	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
Office Action Comments	10/571,464	STEFFL, UDO					
Office Action Summary	Examiner	Art Unit					
	RIP A. LEE	1796					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on 22 Se	entember 2008						
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<i>,</i> —	, <del></del>						
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
discour in assertations with the practice and of E	A parte Gadyle, 1000 C.D. 11, 10	0.0.210.					
Disposition of Claims							
<ul> <li>4) Claim(s) 1-6,8-14,16-18 and 21-24 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) Claim(s) is/are allowed.</li> <li>6) Claim(s) 1-6,8-14, 16-18, and 21-24 is/are rejected.</li> <li>7) Claim(s) is/are objected to.</li> <li>Claim(s) are subject to restriction and/or election requirement.</li> </ul>							
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ acc	epted or b)⊡ objected to by the E	Examiner.					
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Ex	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)							
1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application  6) Other:							

## **DETAILED ACTION**

This office action follows a response filed on September 22, 2008. Claims 16 was amended, and new claim 24 was added. Claims 1-6, 8-14, 16-18, and 21-24 are pending.

## Claim Rejections - 35 USC § 102 / 35 USC § 103

- 1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 2. Claims 1-6, 11-13, 16, and 21-23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Masuyama *et al.* (U.S. 6,013,709) in view of evidence presented in Ishihara *et al.* (JP 62-187708; equivalent U.S. 4,680,353 relied upon for translation) for the same reasons set forth in the previous office action dated June 20, 2008.

Masuyama *et al.* teaches a composition comprising a resin component containing (A) polyamide resin, (B) syndiotactic polystyrene resin, (C) compatibilizing resin, and (D) (un)modified rubbery elastomer.

Polymer (A) is polyamide-6 or polyamide-6,6, or those derived from adipic acid and *m*-xylylenediamine, *i.e.*, nylon-MXD6 (col. 4., lines 50-56).

The polystyrene component (B) exhibits greater than 85 % of racemic diads, as determined by <sup>13</sup>C NMR spectroscopy (col. 3, line 55) and a weight average molecular weight of greater than 50,000 (col. 4, line 13). According to the inventors, and as shown in Preparation example 1, syndiotactic polystyrene homopolymer, labeled SPS, may be prepared according to the method taught in Ishihara *et al.*, JP 62-187708 (see col. 4, line 28). Turning to this reference, one finds that SPS with comparable molecular weight of 350,000 and 90 % racemic dyads has a melting point of 270 °C. Thus, it may be concluded that the polystyrenes of Masuyama *et al.*, prepared with similar catalysts and having comparable molecular weight and microstructure, exhibit a melting point within the claimed range of 160-310 °C.

Compatibilizing resin (C) is compatible with the polystyrene resin, and it contains a polar functional group that reacts with polyamide resin. A discrete example is styrene-maleic anhydride copolymer (col. 6, line 8). Styrenic graft copolymers also fall under the class of compatibilizing resin, and these include SPS modified with maleic anhydride, SPS modified with glycidyl methacrylate, and styrene-methyl methacrylate graft copolymer (col. 6, lines 14-22).

Component (D) is a rubbery polymer selected from SBR, SBS, SIR, SIS (mixed polymer of butadiene and/or isoprene with styrene), and SEB, SEBS, SEP, SEPS (non-polar olefin copolymer); col. 9, lines 32-34).

Suitable coupling agent and glass film forming auxiliaries for improving dispersion are disclosed in col. 13, line 25-col. 14, line 20. Further conventional processing aids such as nucleating agent, mold release agent, metal soaps, flame retardants, antistatic agents, reinforcing filler such as glass fiber (col. 13, line 20), and conductive filler such as carbon black, graphite, (col. 13, line 14), and ceramic fiber (col. 13, line 2). Filler constitutes 1-350 parts by weight of the entire composition (col. 14, line 30).

Compositions find use in manufacture of molded automobile parts (col. 1, lines 10-15). Masuyama *et al.* states that inventive compositions have excellent resistance to heat aging, however, the reference is silent with respect to heat deflection, Vicat softening temperature, E modulus, or coefficient of expansion. However, in view of the fact that the composition of the prior art is substantially the same as that described in the instant claims, a reasonable basis exists to believe that the composition exhibits substantially the same properties. Since the PTO can not conduct experiments, the burden of proof is shifted to the Applicants to establish an unobviousness difference. *In re Fitzgerald*, 619 F.2d. 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112-2112.02. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977).

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3. Claims 5 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuyama *et al.* in view of Steffl (DE 101 34 142) for the same reasons set forth in the previous office action dated June 20, 2008.

(a) Masuyama *et al.* discloses styrene-maleic anhydride copolymer as compatibilizing resin, as well as those derived from polystyrene (col. 6, lines 1-3) containing polar groups such as carboxylic acid amide groups (col. 5, lines 60 and 64). Masuyama *et al.* does not elucidate the structure of these polymers.

Steffl teaches use of poly(styrene-co-maleic acid imide) as compatibilizing polymer for preparation of syndiotactic polystyrene resin compositions (page 3, lines 1-8). The poly(styreneco-maleic acid imide) contains 0.1-10 mole % of maleic anhyride groups have not been converted to imide and a weight average molecular weight of 80,000-20,000; see paragraph [0019]. The combination of references would have suggested to one having ordinary skill in the art to use the poly(styrene-co-maleic acid imide) of Steffl in the composition of Masuyama et al. because Masuyama et al. discloses use of polystyrene containing carboxylic acid amide groups, and the polymers disclosed in Steffl is a polystyrene containing cyclic carboxylic acid amide Since Steffl teaches that poly(styrene-co-maleic acid imide) is an effective groups. compatibilizing polymer for syndiotactic polystyrene compositions, it would have been obvious to one having ordinary skill in the art to use the poly(styrene-co-maleic acid imide) as compatibilizing polymer for the syndiotactic polystyrene compositions of Masuyama et al. Regarding the glass transition temperature of poly(styrene-co-maleic acid imide), since the poly(styrene-co-maleic acid imide) of Steffl is identical to the poly(styrene-co-maleic acid imide) recited in the instant claims, a reasonable basis exists to believe that it exhibits the claimed  $T_{\rm g}$ . Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

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- (b) Masuyama et al. also discloses compatibilizing resin derived from polystyrene (col. 6, lines 1-3) containing polar groups such as oxazoline groups (col. 5, lines 60 and 64). Masuyama et al. does not elucidate the structure of these polymers. Steffl teaches that poly(styrene-comethylvinyloxazoline) and poly(styrene-co-methylvinyloxazoline-co-acrylontrile) are effective compatibilizing polymers preparation of syndiotactic polystyrene resin compositions (paragraph [0017]). The combination of references would have suggested to one having ordinary skill in the art to use poly(styrene-co-methylvinyloxazoline) and poly(styrene-co-methylvinyloxazoline-coacrylontrile), disclosed in Steffl, in the composition of Masuyama et al. because Masuyama et al. discloses use of polystyrene containing oxazoline groups, and the polymers disclosed in Steffl are polystyrenes containing the requisite oxazoline groups. Therefore, it would have been obvious to one having ordinary skill in the art to use poly(styrene-co-methylvinyloxazoline) and poly(styrene-co-methylvinyloxazoline-co-acrylontrile) as compatibilizing polymer in the composition of Masuyama et al., and one having ordinary skill in the art would have expected such an embodiment to result in a useful product. The combination is especially obvious because Masuyama et al. contemplates use of polystyrene polymer containing oxazoline groups, and Steffl fills in the otherwise missing element.
- (c) Masuyama *et al.* discloses styrene-maleic anhydride copolymer as compatibilizing resin, but it does not teach use of poly(styrene-co-acrylonitrile). Steffl teaches that poly(styrene-co-maleic anhydride) and poly(styrene-co-acrylonitrile) are functionally equivalent compatibilizing polymers for preparation of syndiotactic polystyrene resin compositions (page 2, line 66-68). Thus, it would have been obvious to one having ordinary skill in the art to prepare make the composition of Masuyama *et al.* using poly(styrene-co-acrylonitrile) as compatibilizing resin because one having ordinary skill in the art would have expected functionally equivalent components to produce a useful product.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuyama *et al.* in view of Paeglis *et al.* (U.S. 5,569,516) for the same reasons set forth in the previous office action dated June 20, 2008.

Masuyama *et al.* teaches incorporation of carbon black filler, but the inventors have not elucidated the nature of the filler. Paeglis *et al.* discloses conventional carbon black having an average particle size of 10-100 nm, with a (BET, *i.e.*, N<sub>2</sub> adsorption) surface area of 30-1500 m<sup>2</sup>/g and a DBT absorption of 80-350 cm<sup>3</sup>/100g that is well suited as filler for thermoplastic resins. It would have been obvious to one having ordinary skill in the art, absent any showing of criticality or unexpected results, to use the carbon black shown in Paeglis *et al.* in the composition of Masuyama *et al.* in order to make a useful product. Since the prior art shows that this type of carbon black is used for compounding in thermoplastics, one having ordinary skill in the art would have expected the combination to work with a reasonable expectation of success.

5. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuyama *et al.* in view of Takado *et al.* (U.S. 5,114,522) for the same reasons set forth in the previous office action dated June 20, 2008.

Masuyama *et al.* discloses inventive compositions, which have excellent mechanical and chemical and heat resistant properties, find use in manufacture of molded automobile parts (col. 1, lines 10-15), but further details are not provided. Takado *et al.* discloses that automobile bumpers are prepared from high shock absorbing synthetic resins such as polystyrene (col. 2, line 20). The combination of references would have suggested to one having ordinary skill in the art that compositions of Masuyama *et al.*, which have excellent mechanical properties, are useful for making a car part such as a bumper. Therefore, it would have been obvious to one having ordinary skill in the art to make an automobile bumper using the composition of Masuyama *et al.*, and one having ordinary skill in the art would have reasonably expected to make such a molded article with a high degree of success. The skilled artisan also would have found it obvious to make such a molded article via blow molding because Takado *et al.* teaches this method for making automobile bumpers.

6. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuyama *et al.* in view of Saito *et al.* (U.S. 5,104,937) for the same reasons set forth in the previous office action dated June 20, 2008.

Masuyama *et al.* teaches that inventive compositions find use in manufacture of molded automobile parts, however, the reference does not disclose the type of part. Saito *et al.* discloses high impact polymer compositions are useful for making injection molded automobile parts such as a door panel or quarter panel (col. 5, lines 26-38). Compositions of Masuyama *et al.*, while rigid, have excellent toughness properties, as well as heat and water resistance. One having ordinary skill in the art would have found it obvious to use such a composition for manufacturing a door panel or quarter panel since these articles would require the properties exhibited by the compositions in Masuyama *et al.* 

7. Claim 24 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Masuyama *et al.* (U.S. 6,013,709) in view of evidence presented in Ishihara *et al.* (JP 62-187708; equivalent U.S. 4,680,353 relied upon for translation).

Masuyama *et al.* teaches a composition comprising a resin component containing (A) polyamide resin, (B) syndiotactic polystyrene resin, (C) compatibilizing resin, and (D) (un)modified rubbery elastomer. Additives include a copper compound and an iodine compound, and inspection of the disclosure reveals that these are copper salts and ionic salts of iodides, all of which qualify as "conductive additives." Masuyama *et al.* is silent with regard to the physical property of the composition as recited in the claim, however, in view of the fact that the composition of the prior art is substantially the same as that described in the instant claims, a reasonable basis exists to believe that the composition exhibits substantially the same properties. Since the PTO can not conduct experiments, the burden of proof is shifted to the Applicants to establish an unobviousness difference. *In re Fitzgerald*, 619 F.2d. 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112-2112.02. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977).

## Response to Arguments

8. The rejection of claim 16 under 35 U.S.C. 112, second paragraph, set forth in the previous office action dated June 20, 2008, has been overcome by amendment.

9. Applicant traverses the rejection of claims over Masuyama *et al.* (U.S. 6,013,709), herein after, "Masayuma." Applicant submits that Masuyama does not specifically disclose the presently claimed composition: (A) a polyamide, (B) a syndiotactic monovinyl aromatic homopolymer or copolymer, (C) a polystyrene copolymer or polystyrene graft copolymer, and (D) impact resistance modifier.

A review of the prior art is instructive. Masuyama *et al.* teaches a composition comprising a resin component containing (A) polyamide resin, (B) syndiotactic polystyrene resin, (C) compatibilizing resin, and (D) (un)modified rubbery elastomer.

The claimed invention and that of the prior art have been tabulated for clarity.

Claim 1	Masuyama et al. (U.S. 6,013,709)	
(A) polyamide	(A) polyamide	
(B) syndiotactic monvinyl aromatic homo/copolymer	(B) syndiotactic polystyrene	
(C) polystyrene copolymer or polystyrene graft copolymer	(C) compatibilizing resin	
(D) impact resistance modifier	(D) (un)modified rubbery elastomer	

Applicant submits that Masuyama discloses over 20 compounds as its possible component (c), and goes on to describe a great deal many additional more specific compounds, and discloses a large number of possible ingredients that can be used as component (d). Applicant submits that the "shear [sic] number of possible species that can be formed form various parts of Masayuma" makes it evident that the invention as claimed is not anticipated.

Inspection of the table above reveals that the Masayuma discloses the components described in claim 1. The skilled artisan consults the text of Masayuma to discover that compatibilizing resin (C) is a polystyrene copolymer or polystyrene graft copolymer (col. 6, lines 7-22, shown below left); the disclosure at col. 7, line 42 to col. 8, line 43 teaches the method of making polystyrene graft copolymer. Despite the number of individual polystyrene copolymers or polystyrene graft copolymers enumerated in the prior art, it is clear that Masayuma's compatibilizing resin meets component (C), *i.e.*, a polystyrene copolymer or polystyrene graft copolymer, of instant claim 1.

Specific examples of component (c) include modified styrenic polymers, such as styrene-maleic anhydride copolymer (SMA), styrene-glycidyl methacrylate copolymer, polystyrene modified with a carboxylic acid at the ends, polystyrene modified with oxazoline group at the ends, polystyrene modified with amine group at the ends, sulfonated polystyrenes, styrenic ionomers, styrene-methyl methacrylate graft polymer, (styrene-glycidyl methacrylate)-methyl methacrylate graft polymer, acrylate-styrene graft polymers modified with an acid, (styrene-glycidyl methacrylate)-styrene graft polymer, polybutylene terephthalate-polystyrene graft polymer, SPS modified with maleic anhydride, SPS modified with fumaric acid, SPS modified with an amine,

Specific examples of the rubbery elastomer used as component (d) include natural rubber, polybutadiene, polyisoprene, polyisobutylene, neoprene, polysnifide rubber, thiokol rubber, acrylic rubber, urethane rubber, silicone rubber, epichlorohydrin rubber, styrene-butadiene block copolymer (SBR), hydrogenated styrene-butadiene block copolymer (SEB), styrene-butadiene-styrene block copolymer (SBS), hydrogenated styrene-butadiene-styrene block copolymer (SEBS), styrene-isoprene block copolymer (SIR), hydrogenated styrene-isoprene block copolymer (SEP), styrene-isoprene-styrene block copolymer (SIS), hydrogenated styrene-isoprene-styrene block copolymer (SEPS), styrene-butadiene random copolymer, hydrogenated styrene-butadiene random copolymer, styreneethylene-propylene random copolymer, styrene-ethylenebutylene random copolymer, ethylene-propylene rubber (EPR), ethylene-propylene-diene rubber (EPDM), core-

According to the Applicant's disclosure, impact resistance modifier (D) is a polybutadiene, a polyisobutylene, a mixed polymer of butadiene and/or isoprene with styrene and other co-monomers, a hydrated mixed polymer and/or a mixed polymer created through grafting with maleic acid anhydride, itaconic acid anhydride, (meth)acrylic acid and their esters, ethylene-propylene, and ethylene-propylene-diene. Masayuma reveals that (un)modified rubbery elastomer (D) are mixed polymers of butadiene and/or isoprene with styrene and other co-monomers, as well as ethylene-propylene, and ethylene-propylene-diene elastomers; see col. 9, lines 5-20, shown above right. Corresponding polymers modified by grafting with maleic anhydride are taught in Masayuma, subsequent lines 35-55. Despite the number of individual polymers enumerated in the prior art, it is clear that Masayuma's elastomer meets component (C), i.e., a impact resistance modifier, of instant claim 1.

Applicant's argument is not persuasive because it is clear from the analysis above that Masayuma's composition meets the composition described in instant claim 1. Accordingly, the subject matter of claim 1 is anticipated by Masayuma.

Masayuma is silent with respect to the conditional physical property (heat deflection less than 15 mm (ISO 3167 - 4 mm, 250 °C, 30 min), however, in view of the fact that the composition of the prior art is substantially the same as that recited in the claims, the person of ordinary skill in the art would have reasonable basis to believe that the composition of the prior art also exhibits the claimed property. Accordingly, the burden of proof was shifted to Applicant to establish any unobviousness differences with respect to this property. Applicant presents statements with respect to long term and short term heat stabilization of materials, however, to date, Applicant has not met their burden of proof in establishing unobviousness differences with respect to the claimed property.

Applicant also points to the fact that Masayuma's working examples use modified modified polyphenylene ethers as component (C), and this further shows that Masayuma can not anticipate the present invention.

This line of reasoning is not persuasive because it is well settled that a reference must be considered in its entirety and that the disclosure of a reference is not limited to preferred embodiments or specific working examples therein. *In re Fracalossi*, 681 F.2d 792, 794, 215 USPQ 569, 570 (CCPA 1982); *In re Lamberti*, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976). That is, "Applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others." *In re Courtright*, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967). As elucidated above, Masayuma clearly teaches a polystyrene copolymer or polystyrene graft copolymer as the compatibilizing resin.

Applicant has not addressed dependent claims 2-6, 11-13, 16, and 21-23. In light of these considerations, the rejection has not been withdrawn.

Applicant traverses the rejection of claim 2. Applicant submits that the transitional phrases "consisting essentially of" and "comprising" are different terms with legally different scope and can not be considered equivalent. Applicant points to the fact that Masayuma requires addition of a copper compound and an iodine compound to attain the claimed properties. Since these materials are required, a composition omitting them would not be expected to provide the required properties. Applicant states that the present invention provides the necessary thermal stability without the addition of a copper compound and an iodine compound and addition of these components would change, and materially affect the basic and novel characteristics of the claimed invention. Based on these considerations, Applicant submits that the subject of claim 2 is novel and non obvious over Masayuma.

Applicant's line of reasoning fails to persuade because it is not shown that Masayuma requires addition of copper and iodine compounds to attain the *claimed* property (heat deflection less than 15 mm; ISO 3167 - 4 mm, 250 °C, 30 min). Therefore the conclusion that presence of copper and iodine compounds will materially affect the basic and novel characteristics of the claimed invention is a non sequitur.

According to MPEP § 211.03, when Applicant contends that additional materials in the prior art are excluded by the recitation, "consisting essentially of," Applicant has the burden of showing that introduction of additional components would materially change the characteristics of Applicant's invention. *In re De Lajarte*, 337 F.2d 870, 143 USPQ 256 (CCPA 1964); *Ex parte Hoffman*, 12 USPQ2d 1061, 1064-64 (BPAI 1989). Apart form arguments of counsel, Applicant has not met this burden of proof, and therefore, the rejection of claim 2 has been maintained.

Applicant contends that new claim 24 has been added to further distinguish Masayuma. New claim 24 utilizes the transitional phrase "consisting of" which unequivocally excludes use of copper and iodine compounds. Claim 24 remains rejected over Masyuma for the reasons set forth in paragraph 7 of this office action.

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Applicant traverses the rejection of claims 5, 8-10, 14, and 16-18 under 35 U.S.C. 103(a) over the combination of Masayuma in view of secondary references, Steffl (DE 101 34 142), Paeglis *et al.* (U.S. 5,569,516), Takado *et al.* (U.S. 5,114,522), and Saito *et al.* (U.S. 5,104,937). Traversal is based on the premise that Masayuma does not disclose, suggest and teach each and every limitation of claim 1.

The rejection of claim 1 over Masayuma has been maintained for all reasons set forth in this office action. Since Applicant has not shown why disclosures of the prior art would have suggested to the person of ordinary skill in the art would to combine teachings to arrive at the subject matter of claims 5, 8-10, 14, and 16-18. Therefore, the rejections of these claims have been maintained.

## Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu S. Jagannathan, can be reached at (571)272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/Rip A. Lee/ Art Unit 1796

December 21, 2008

/Vasu Jagannathan/ Supervisory Patent Examiner, Art Unit 1796